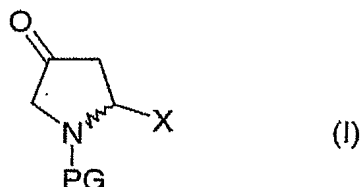


Claims:

1. A process for preparing N-protected 4-ketoproline derivatives of the general formula (I)

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in which

X is an acid, ester or amide function,

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PG is an N-protective group which comprises a carbonyl function and is bonded via this function to the nitrogen,

by oxidizing the corresponding 4-hydroxyproline compound with an oxidizing agent in the presence of catalytically active ruthenium compounds, characterized in that the oxidation is carried out in an aqueous one-phase system, and the oxidation product (I) is allowed to crystallize out during the addition of the oxidizing agent.

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2. The process as claimed in claim 1, characterized in that the temperature during the oxidation is kept at $\leq 30^{\circ}\text{C}$, in particular $\leq 20^{\circ}\text{C}$, preferably $\leq 15^{\circ}\text{C}$.

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3. The process as claimed in one or more of the preceding claims, characterized in that salts of hypohalites, halates and perhalates are employed as oxidizing agents.

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4. The process as claimed in one or more of the preceding claims, characterized in that seed crystals are added to the reaction mixture after addition of 50% of the oxidizing agent.